Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

(DRAFT)
Title V, Construction / Operating
Permit: V-07-041
North American Pipe Corporation
Calvert City, KY 42029
October 3, 2007
Philip T. Jarboe, Reviewer

SOURCE ID:	21-157-00058
AGENCY INTEREST:	34469
ACTIVITY:	APE20070001

SOURCE DESCRIPTION:
North American Pipe Corporation, Westlake PVC Corporation, and Westlake Vinyls Incorporated are all subsidiaries of Westlake Chemical Corporation. The three facilities are located within a continuous area. Even though the facilities have separate Title V permits, the facilities are a single major source, pursuant to 401 KAR 52:001 Section 1(45)(a) definitions. Each owner/operator is responsible and liable for their own violations, unless there is a joint cause for the violations.

North American Pipe Corporation, Westlake PVC Corporation, and Westlake Vinyls Incorporated may also be a single stationary source, pursuant to 401 KAR 51:001 Section 1 (29) and (234) definitions; however, the emissions increase from the construction/operation of the North American Pipe Corporation proposed plant is below the significant levels, as defined in 401 KAR 51:001 Section 1 (222) and (223). Therefore, the Kentucky Division for Air Quality (Division) reserves the right to make a determination on the single stationary source issue in the future, if and when, new construction or modifications at any of the facilities are above the significant emissions increase levels, as defined in 401 KAR 51:001.

North American Pipe Corporation is a manufacturer of large diameter polyvinyl chloride (PVC) pipe falling under the primary SIC code of 3084. The primary raw materials are PVC resin, calcium carbonate, a low-volatile stabilizer oil, and other minor additives A portion of the formulation is mixed in the hot mixer where it is frictionally heated prior to transfer to the cool mixer where it is mixed with additional PVC resin to generate the compound that is used to manufacture the pipe. The compound is stored in a surge hopper prior to transfer to one of three compound silos. From these silos the material is transferred to the two lines where the pipe is formed by extrusion through specially designed molds. After the pipe cools it is sawed into sections. Product that does not meet quality control standards are processed through a pre-breaker and grinder process and then a pulverizer. The material is then placed in 2,000 pound super sacks for recycled back into the process. Excess compound produced above the amount required for pipe production is transferred to railcar loading or a super sack/box station for shipment to outside locations.

COMMENTS:

(1) Type of Control and Efficiency

A baghouse filter is used for pollution control of particulate matter from emission unit 08. Emission points 08A and 08C are vented directly to the baghouse. Emission points 08B and 08D feed to separate cyclones that are used for product recovery. The cyclones are exhausted to the baghouse. The baghouse control device has a 99.0 % efficiency and the collected material in the baghouse is disposed.

(2) Emission Factors

The particulate emission factor from the pipe recycle process (Emission Unit 08) was based on source sampling performed in December 2003 at a similar source.

The raw material used in the manufacturing process is transported between the various processes steps with vacuum pumps that use cartridge filters equipped with jet pulse cleaning. The cartridge filters are recovery devices used to prevent loss of the raw materials and are inherent in the process design.

(3) Applicable Regulations

401 KAR 59:010 – New process operations. Applicable with respect to particulate emissions to each affected facility commenced on or after July 2, 1975 applies to Emission Units 01 through 11.

401 KAR 59:055 – General Compliance Requirements applies to Emission Unit 08.

EMISSION AND OPERATING CAPS DESCRIPTION:

Pursuant to a voluntary limitation by the permittee, the throughput for the pipe recycle process, Emission Unit 08, is limited to 11 million lbs/yr (10% of total plant capacity). The baghouse filter for the unit shall be operational and maintained in a manner consistent with good air pollution practices anytime Emission Unit 08 is in operation.

PERIODIC MONITORING:

(1) The monthly amount of material processed by each emission unit.

(2) For each baghouse the following information shall be recorded:
   (a) Monthly monitoring of the pressure drop across the baghouse.
   (b) Monthly visible inspection of the baghouse filter material.

OPERATIONAL FLEXIBILITY:

None

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Section 60.11 and 40 CFR Part 61, Section 61.12 into its air quality regulations.